

NICKEL-BASE ALLOY

Abstract of Disclosure

A castable and weldable nickel-base alloy that exhibits a desirable balance of strength and resistance to corrosion and oxidation suitable for gas turbine engine applications. A suitable composition for the alloy consists essentially of, by weight, 10% to 25% cobalt, 20% to 28% chromium, 1% to 3% tungsten, 0.5% to 1.5% aluminum, 1.5% to 2.8% titanium, 0.8% to 1.45% columbium, tantalum in an amount less than columbium and $Cb + 0.508Ta$ is 1.15% to 1.45%, 0.001% to 0.025% boron, up to 0.4% zirconium, 0.02% to 0.15% carbon, with the balance essentially nickel and incidental impurities.

Figures